## Ministry of Information and Industry Software and Integrated Circuit Promotion Center, China

### **CSIP**

Intellectual Property Expertise Center of Judicature

### **Identification of Consultation Submissions**

[2010] No. 013

Forensic license number of intellectual property: 110,008,001

Intellectual Property Expertise Center of Judicature, software and integrated circuit Promotion Center Ministry of industry and information technology

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# Intellectual Property Expertise Center of Judicature, software and integrated circuit Promotion Center Ministry of industry and information technology

### Identification of consultation submissions

[2010] No. 013

CSIP Intellectual Property Expertise Center of Judicature was entrusted by the Shanghai Institute of Universal Chemical Technology and Xie Jianping, analyze the method of instant messaging software QQ and the patent for "The Solution for Assigning Addresses to Online Computers in Full Digital" whose Patent No is 98122785.6, and determine whether the methods and independent claim 1-2 is same or equivalent, and provide the identification of consultation submissions.

The submissions are divided into three parts: part I: the overview of appraisal work; part II: the body; part III: the annexes list.

## Part I - Overview of the appraisal work

#### 1. A basic condition

#### Identification of principal

Name: Shanghai Institute of Universal Chemical Technology

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China

#### Identification of the trustees

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Address: Bowangyuan 10, No. 5 Yangfangdian East Road Haidian District, Beijing 100038, China

#### The qualification of identification of the trustees

- "The National Forensic Experts and Judicial Forensic Institutions Register" for Beijing
- Judicial Identification of license (practicing certificate number: 110,008,001)

### 2. The identification procedure

### 2.1 Auditing identification of materials:

Shanghai Institute of Universal Chemical Technology submit the power of Attorney that is forensic examination on September 30, 2010. The request is analyzing the method of instant messaging software QQ and the patent for "The Solution for Assigning Addresses to Online Computers in Full Digital "whose Patent No is 98122785.6, and determining whether the methods and independent claim 1-2 is same or equivalent. The clients also submit materials as below:

- (1) Invention patent specification, ZL98122785.6, totals 6 pages;
- (2) Technical analysis report which is about "Identification of submission" No. 011 [2010], from Shanghai Oriental computer judicial expertise, totals 59 pages;
- (3) Identification of submission from Shanghai Oriental computer judicial expertise, No. 011 [2010], totals 23 pages.

### 2.2 Accept the consignment of identification

Materials to be submitted meet the requirements after examination, identification of the client is in our line of business, procedures are complete, and we accept the identification of delegates.

#### 2.3 Hold seminar

Identification group of experts held seminar, the experts read "The Solution for Assigning Addresses to Online Computers in Full Digital" - ZL98122785.6 of authorized notice book, full understanding what the invention patent will solve and the characteristics in the technical scheme, and realizing the functions and effects in the technical scheme. The experts analyze the characteristics of QQ in the process of real - time communication, and determining whether the methods of QQ and independent claim 1-2 is same or equivalent.

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### Part II - The body of Identification

#### 1. Identification basis

- 1. Article 59th part 1 on the "Patent Law of the People's Republic of China" (effective on October 1, 2009).
- 2. Article 17<sup>th</sup> on the "Several Provisions of the Supreme People's Court on Issues Concerning Applicable Laws to the Trial of Patent Controversies" (Judicial Explanation No. 21 [2001]).
- 3. "Interpretation of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases" (Judicial Explanation No. 21 [2009], effective on January 1, 2010).

### 2. The principle of identification

### 2.1 Determination of the scope of patent protection

Scope of protection of patent right for invention shall be determined by the technical characteristics in the patent claim, all the technical characteristics of the claims is the object of legal protection.

The independent claim for invention as a whole embody the technical scheme of the patent, it describes the necessary features of the technology to solve technical problems, the scope of protection is more than a subordinate claim. Therefore, we should also explain to the independent claim when we determined whether the methods and independent claim is same or equivalent.

When we explain to the patent claims, we should determine the claims in accordance with the provisions of article 59-1 of the patent law and the understanding of the general technical personnel in the field for the claims.

We may take the specification and the drawings, other claims in the claims and patent examination files to interpret relevant claims. Where the diction of the claims is specially defined in the specification, such special definitions shall prevail.

Where the technical features of the claims are described by function or effect, we shall determine the contents of such technical features in combination of the specific implementation method and its equivalent implementation method of such function or effect described by the specifications and drawings.

#### 2.2 principle of all the technical characteristics

To judge whether charged with infringing product or method fell into the scope of protection of the patent, characteristics of the product or technology and all the technical characteristics of the comparative patent claim should be compared one by one, if charged with infringing product or method contain all the technical characteristics of the comparative patent claim, then the product or method fell into the scope of protection of the comparative patent.

Charged with infringing products or methods are missing more than one technical feature which were recorded in the claims of the comparative patent, or more than one technical features were not the same and not equal between the accused object and the comparative patent, it should be sure that the charged with infringing products or methods did not fell into the scope of protection of the comparative patent.

### 2.2 The equivalence principle

The extent of protection of the patent right should be determined by the features that is equivalent to essential technical features.

The equivalence principle means that it can be considered that more than one features of the charged with infringing products or methods is equivalent to the technical characteristics of the comparative patent after analysis, although them are literally not the same.

The equivalent features need to meet the following two conditions: (1) The technical features accused infringing the claims and the corresponding technical features compared to the same means, to achieve essentially the same function, to the same

effect; (2) Without going through creative work, the general technical personnel in the field can associating the technical feature by reading the patent specification, the drawings and the patent claims

#### 3. The technical scheme of patent 98122785.6

The relevant information of patent 98122785.6 is as following:

Invention Names: The Solution for Assigning Addresses to Online Computers in Full

Digital

Patent Number: ZL98122785.6

Filing Date: December 4, 1998

Authorized Notice Date: November 7, 2001

The Patentee: Xie Jianping, Wei Mengen

The Patent whose patent number is 98122785.6 contains a total of 5 claims, claims 1, 3, 4 and 5 involving all digital coding method for assigning addresses to Internet computers, referred to in claim 2 involved the use of claims 1 of accessing the Internet. Of those, claims 1 and 2 as an independent claim whose protection is the most compared with the other subordinate claim. According to the general principle of patent infringement, identification of this group only explains the claims whose scope of protection is the most.

#### 3.1 Technical scheme of claim 1

1. A solution for assigning the addresses to the online computers by using the full digital code, wherein: it is constituted by the full digital code address (FDCA), which is composed of the online number, the telephone number and the category number. Here, the said online number refers to the digital number of the established network site, which is specified by the country or the area; the said telephone number includes the IDDD code of the country where user stays, the area code of the domestic DDD of the user's area, and the telephone number of the user's company or home; and the category number is digital number specified by the country or area for demarcating uniformly the business category.

For ease of comparison, identification of the groups decomposes all the technical features of the independent claim, as described in the following:

- A) assigning addresses to the online computer by using the full digital code;
- B) the said address is constituted by the full digital code address, which is composed of the online number, telephone number, category number;
- C) the said online number refers to the digital number of the digital number of the established network site, which is specified by the country or the area;
- D) the said telephone number includes the IDDD code of the country where the user stays, the area code of the domestic DDD of the user's area, and the telephone number of the user's company or home;
- E) the said category number is digital number specified by the country or area for demarcating uniformly the business category;

#### 3.2 Technical scheme of claim 2

2. A Solution according to Claim 1, for accessing the Internet by using the address coding solution, wherein, the E-mail box can be accessed or the Internet can be browsed by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer; And linking the corresponding digital code, the full digital code address can be interpreted by the dedicated interpreting software into IP address, or the domain name, or Chinese domain name hierarchy system, and each address corresponds appropriately to only one existing IP address, or the domain name, or Chinese domain name hierarchy system, then the E-mail box can be accessed or the Internet can be browsed.

For ease of comparison, identification of the groups decomposes all the technical features of the independent claim, as described in the following:

- A) A Solution according to Claim 1, for accessing the Internet by using the address coding solution;
- B) by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer;

C) And linking the corresponding digital code, the full digital code address can be interpreted by the dedicated interpreting software into IP address, or the domain name, or Chinese domain name hierarchy system, and each address corresponds appropriately to only one existing IP address, or the domain name, or Chinese domain name hierarchy system, then the E-mail box can be accessed or the Internet can be browsed;

#### 3.3 The effectiveness of patents 98122785.6

The patent for No. 98122785.6, provides the method which assigns the addresses to the online computers by using all digital code, and provides the method which access the Internet by using the method of claim 1, wherein, it is constituted by the full digital code which is simple, easy to remember, Internet can be browsed by inputting to the modern of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer.

#### 4 Technical Scheme of communication of QQ

### 4.1 communication environment of mobile QQ client

According to annex 2 and annex 1, and system operation environment of QQ, using QQ client on the mobile device has become an important approach of QQ system. As we all know China Unicom, China Telecom, China Mobile to build a value-added business partner platform, the SP's server access to the Internet network of China Unicom, China Telecom, China Mobile, which contains the mobile GSM networks and 3G networks. Maybe, by the way of server hosting, SP's businesses were performing in China Unicom, China Telecom, China Mobile's GSM and 3G networks, and conveying to cell phone of China Unicom, China Telecom, China Mobile. China Unicom, China Telecom, China Mobile established value-added business partnership with Tencent QQ, and provided operating conditions of network, and provided the channel to access Internet for Tencent QQ users. In the software simulator of mobile device, we ran the relevant client program of QQ, which has been published. The communication method of mobile QQ had been analyzed by using virtual simulations.

### 4.2 The technical features of communication method of QQ

#### 1. Using QQ number on the logon procedure:

QQ number input to the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer, and then the public fixed server lists corresponding to the address list server is accessed for logon request; the fixed servers return the IP address of actual logon server, under load, and so the actual situation; QQ client sends the logon request for the actual server, instant message software of QQ (hereinafter referred to as QQ software) enters QQ number and password to authenticate, the QQ number is all digital code as communications, and the password is associated with the number of QQ; at last, the server is selected for logon after security certification, then the server gets the number of QQ, the network address and the port.

#### 2. QQ instant messaging procedure after logon:

After logon, the procedure of communication includes three common functions: Instant Messaging, file transmission and voice communication, and other application based on QQ number.

The mechanism of Instant message communication use forwarding of technical scheme. The sender will send the QQ number and message to the server, and then the server will contain mappings of QQ number to the network address of the recipient, and then send a message to the recipient address. The sender and recipient must login to use the instant messaging function in QQ software.

The mechanism of file transmission used the point-to-point of technical scheme. The sender sent the request of file transmission to the server, the server will contain mappings of QQ number to the network address of the sender, and the server will also contain mappings of QQ number to the network address of the recipient, and will send the network address of the sender to the recipient, the file will be transferred after the recipient connect the network address of the sender.

The mechanism of voice communications used the point-to-point of technical scheme. The sender sent the request of voice communication to the server, the server will contain mappings of QQ number to the network address of the sender, and the server will also contain mappings of QQ number to the network address of the recipient, and will send the network address of the sender to the recipient, the

bi-directional voice talk will be established after the recipient connect the network address of the sender.

According to technical report of Identification of submission from Shanghai Oriental computer judicial expertise, No. 011 [2010], the identification group analyzed the communication protocol of QQ software: the addressing methods were specifically analyzed during the communication procedure (entering QQ number by the keyboard, writing memory with QQ number, linking IP address); we got the feature of QQ number, the addressing method, and the technical scheme of communication on this basis. For ease of comparison, the appropriate technical characteristics are listed:

- A. QQ number is the full digital code, and it is equivalent to the full digital address between online computers;
- B. QQ number is the category number;
- C. each QQ number is small class number assigned by the Tencent Inc, by a form of leadership;
- D. QQ network communication is realized by TCP/IP Protocol, that is, using the TCP/IP protocol in the network address;
- E. QQ number input to the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer;
- F. QQ system ultimately realizes the addressing of network and network traffic by the mappings of QQ number to IP address.

### 5. Contrastive analysis

Now, all the technical features of claim 1 & 2 of patent 98122785.6 are compared to the technical features of communication of QQ one by one.

#### 5.1 About the technical features of 'A' and a

The technical features of the patent 98122785.6 are called as 'A': it assigns the address to the online computers by using the full digital code. It may seem that the communication on both sides in the Internet is realized by "address" of the technical

features, it can determine the data transmission on both sides, from the description of the patent Manual 1st page.

The technical features of the relevant technical solution of QQ are called as 'a': QQ number is the full digital code, and QQ number is equivalent to the full digital address for the communication between online computers. The chief reasons are as follows:

- 1) QQ number is the full digital code assigned by Tencent Inc: it is used by the users, and also used in the logon procedure. See the technology analysis report [2010] No. 011 on the 10th page of the submission from "Shanghai Oriental computer judicial expertise".
- 2) QQ number is equivalent to the address which Identify the computer in the QQ protocol.

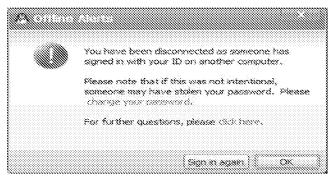
Reference 1: QQ number is equivalent to the IP address of the network layer or Mac address of the link layer from the point of view of the definition and use of the logical.

The address of the layer can map to the address of the next layer by various different mechanism, the physical signal finally is transferred in the link layer and the physical layer.

Communication protocol of the Internet is a multilayer structure, and each layer defines the address for communication between computers. For example, the link layer use a MAC address, the network layer use an IP address, the transport layer use two-dimensional array of {IP, port}. The function of Address means that it can uniquely determine the data communication between both ends, by and only by the address between both ends. For example, the data packages were transferred to the target computer by source and purpose MAC address in the link layer; the data packages were transferred to the target computer by source and purpose IP address in the network layer; the data packages were transferred to the target computer by source and purpose IP address in the transmission layer; The address of the layer can map to the address of the next layer by various different mechanism, the physical signal finally is transferred in the link layer and the physical layer.

QQ number of QQ software is unique to identify the source or the target QQ in the communication protocol.

- (1) The users only need to apply for QQ number and input QQ number by the keyboard of the computer, in addition, no other specific data used to identify.
- (2) Communications between the QQ users must log in to QQ server by using the QQ number, and it will be realized by the mapping which is established between QQ number and the network address through the login process.
- (3) All the establishments of QQ communications only need to the QQ number between both sides, the information about a specific user and the user's computer are not found in all packets. (Specific basis see Reference 1: detailed analysis data in the process of QQ communication)
- (4) The communication Protocol of QQ is used in the application layer, the QQ number maps to the IP address and the port through a specific mapping mechanism, and uses protocol of international standards under the transport layer. (See mapping mechanism according to Reference 2 and section 1.3, 1.4, 1.5 of the annex 2)
- (5) A number of QQ can only correspond to one computer at some point, and the session of logon is terminated before the point. See the following figure:



Therefore, QQ number is the address of QQ communication, whose definition is same with the IP address of the network layer and MAC address of link layer.

Reference 2: the address may not correspond to the computer one by one on the Internet.

A computer may have multiple IP addresses and MAC addresses, similarly a computer may have multiple QQ numbers used to login.

Reference 3: the address of computer can identify the computer on the Internet, and it can also be used to identify users at the same time.

With the development of the Internet, IP address important direction of development is clear that the address is used to identify the computer of the network, and it can be used to identify the user, this is also the important direction of development in the future trusted Internet. (See The National Key Technology R&D Program "Scalable Routing on Key Technologies to Trustworthy Next-Generation Internet", and The National High Technology Research and Development Program of China (863 Program) "Application Demonstration and Research on Key Technologies to Trustworthy Next-Generation Internet" about the Internet infrastructure based on real IPv6 address and the "network addressing architecture based on real IPv6 source address" of IETF standard RFC5210).

Therefore, for QQ number, it is used to distinguish the users at the same time as it is used to identify the computers, which meet the definition of the network address and use in the Internet architecture.

## Reference 4: the address of computer can be used for mobile communication in the Internet system architecture.

The IP address may not be used to identify a fixed computer on the Internet, IP addresses can be used for mobile communication, and identify different computers. The International Standard of Mobile IP show that the same IP can correspond to a different physical computer in the scenarios of mobile application by a certification mechanism.

QQ number is the same as above in the procedure of login and use. The QQ communication of QQ may be achieved in different online computers by the logon procedure using QQ number, and the QQ number corresponds to the current only online computer. A QQ number corresponds to only one IP address of the online computer at a time, see reference 1, and see section 1.2, "detailed analysis of QQ login process".

Therefore, the characteristics of QQ meet the definition and use of the network address in the Internet architecture.

Thus, according to the analysis of reference 1, reference 2, reference 3, reference 4, we believe that the QQ number is equivalent to the address for the communication among the computers. The four references see the technical report of Identification of submission from Shanghai Oriental computer judicial expertise, page 11 and page 12, No. 011 [2010].

Summing up the above analysis, it is considered by the identification team: QQ number is the full digital code, and QQ number is equivalent to the full digital code address of the communication among the online computers, so feature-a is the same as the technical feature A of patent 98122785.6.

#### 5.2 About the technical features of B and b

The technical feature B of Patent 98122785.6 show that the address is the full digital code address made up of the online number, the telephone number and category number. Because of the comma denotes a select, the address can be made up of the online number, and can be made up of the telephone number, and can be made up of the category number and the telephone number, and can be made up of the category number and the telephone number, and can be made up of the category number and the telephone number, and can be made up of the online number and the telephone number.

The technical feature b of the system communication of QQ show that the QQ number belongs to the category of the full digital code address, for the following reasons:

China's MIT identified the business of Tencent QQ as the information service of the second class value-added telecommunication's business. According to the business category, the category of the QQ number is divided into general number, nice number, enterprise number, etc. All the QQ number is the full digital code. The practical application is often omitted for the broad category assigned by the country to Tencent, so that the QQ users only use the existing QQ number. Therefore, the QQ number belongs to the category numbers. See the technical report of Identification of submission from Shanghai Oriental computer judicial expertise, page 10 and page 11, No. 011 [2010].

The QQ number is similar to the telephone number. The number of 86 is assigned for China in the telephone communication, and it does not need dial the number of 86 in our own country, but the number of 86 is needed when we dial an international phone. Therefore, this field technician would easily foresee that Tencent Inc assigned the number of sub-category for every user of QQ, and the number of sub-category is used as the full digital code address of the QQ communication after the logon.

Summing up the above analysis, it is considered by the identification team: the technical feature b of the relevant technical solution is substantially the same as the technical feature B of patent 98122785.6.

#### 5.3 About the technical features of C and c

The technical feature C of Patent 98122785.6 show that the said online number refers to the digital number of the established network site, which is specified by the country or the area; the said telephone number includes the IDDD code of the country where the user stays, the area code of the domestic DDD of the user's area, and the telephone number of the user's company or home; and the category number is the digital number specified by the country or area for demarcating uniformly the business category.

See the following on the paragraph 7th, page 2nd in the manual ZL98122785.6: the category number is the digital number specified respectively, by the country or area for demarcating uniformly the business category. This part of the digital numbers can be set according to the regulations of the user's country or area, or the network site. It can be specified as big categories or sub-categories, usually, only the big categories are specified. When the big category is specified by the method of the term selection, the sub-category digital number can be directed after the category numbers. In practice, if some clients want their addresses to be encrypted, the encrypted digital number can also be directed after the online number of the telephone number. And this encrypted number can be proposed by the client himself and, of course, must be registered first by the address coding organization.

The technical feature c of QQ communications shows that each QQ number is the digital number of sub-categories, and it is assigned through the directed method by Tencent Inc. See the technical report of Identification of submission from Shanghai Oriental computer judicial expertise, page 14, No. 011 [2010].

As the statement about comparison of the technical feature B and b: The QQ number is similar to the telephone number. The number of 86 is assigned for China in the telephone communication, and it does not need dial the number of 86 in our own country, but the number of 86 is needed when we dial an international phone. Therefore, this field technician would easily foresee that Tencent Inc assigned the number of sub-category for every user of QQ, and no longer additional any number marked.

Summing up the above analysis, it is considered by the identification team: the QQ number is equivalent to the category number in the patent 98122785.6, the technical feature c of the relevant technical solution is substantially the same as the technical feature C of patent 98122785.6.

#### 5.4 About the technical features of D and d

The technical feature D of Patent 98122785.6 is a solution according to Claim 1, for assigning the addresses to access the Internet. The technical feature can be found on page 3rd, paragraph 2nd in the technical specification of ZL98122785.6: When the E-mail box is accessed and the Internet is browsed by using the above coding solution, the E-mail box can be accessed or the Internet can be browsed by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer; by linking the corresponding digital code; and by converting it with a dedicated software. In order to be used commonly worldwide, it is necessary to set up a converter which can enable the digital addressed of this invention corresponding appropriately to the existing Internet domain names and IP addresses. This converter is composed of interpreting software. Once FDCA is designated, it can be converted into a respective IP address, or a domain name, or a Chinese domain name hierarchy system, and each FDCA corresponds only to one existing IP address, or a domain name, or a Chinese domain name hierarchy system.

The technical feature d of QQ communications shows that the network protocol used by QQ is TCP/IP, and it means that the network address of TCP/IP protocol is used by QQ. See the technical report of Identification of submission from Shanghai Oriental computer judicial expertise, page 6, paragraph 5, No. 011 [2010].

According to the comparison of the technical feature 'A' and 'a', we can conclude that the technical feature 'a' of the relevant technical solution is substantially the same as the technical feature A of patent 98122785.6. It means that the QQ number is the full digital code, and the QQ number is equivalent to the full digital code address to the online computers. TCP/IP is used by the Internet, and it is also used by QQ. The communications of patent 98122785.6 is the same as the communication of QQ. The technical effort of both 'A' and 'a' is the communication by using address. Therefore, the identification team considered that technical feature d of the relevant technical solution is substantially the same as the technical feature D of patent 98122785.6.

#### 5.5 About the technical features of E and e

The technical feature E of 98122785.6 is, by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer.

The technical feature e of QQ communications is, by inputting QQ number to the computer by dialing up a keyboard of a dial-up mobile phone or the keyboard of the computer.

Technicians in the field know, QQ instant messaging software, whether its PC client or mobile clients, will need to input QQ number to the computer by dialing up a keyboard of a dial-up mobile phone or the keyboard of the computer, which is equivalent to the technical feature E of patent 98122785.6.

Following the comparative analysis, it is considered by the identification team: technical features of both E and e are the same.

#### 5.6 About the technical features of F and f

The technical features F of patent 98122785.6 is a solution: by linking the corresponding digital code; the FDCA can be interpreted by the dedicated interpreting software into an IP address, or a domain name, or a Chinese domain name hierarchy system, and each FDCA corresponds appropriately to one existing IP address, or domain name, or Chinese domain name hierarchy system; the E-mail box can be accessed or the Internet can be browsed. The technical feature can be found on page 3rd, paragraph 2nd in the technical specification of ZL98122785.6: When the E-mail box is accessed and the Internet is browsed by using the above coding solution, the E-mail box can be accessed or the Internet can be browsed by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer; by linking the corresponding digital code; and by converting it with a dedicated software. In order to be used commonly worldwide, it is necessary to set up a converter which can enable the digital addressed of this invention corresponding appropriately to the existing Internet domain names and IP addresses. This converter is composed of interpreting software. Once FDCA is designated, it can be converted into a respective IP address, or a domain name, or a Chinese domain name hierarchy system, and each

FDCA corresponds only to one existing IP address, or a domain name, or a Chinese domain name hierarchy system.

The technical features f of QQ communication is a solution: The network addressing and network communication are achieved by the map of QQ number to the IP address.

The network addressing based on the QQ number is achieved by the map of the QQ number to the port and the IP address. The mapping mechanism meets the address mapping method of the patent 98122785.6, and the analysis is as follows:

The analysis of complete data packet during logon on QQ:

No any data of application is used to identify the QQ client but the QQ number and the IP address and the port of the client. Therefore, the network addressing would be achieved by the map of the QQ number to the IP address & port.

The analysis of complete data packet during the procedure of QQ instant-messaging:

The sender sends data packets to the recipient, and the data packets are forwarded to a remote server. No any data can be used to identify the QQ client but the QQ number of the recipient in the data packets. Since then, the server directly and immediately forwarded the message to the recipient where would be determined by the IP address and port. The server would not work except for owning the IP address and the port that can tell it where the recipient is, so it means that the map of the QQ number to the IP address and the port must exist on the server. Without doubt, the establishment of the map would be completed after the QQ login, there are no other possible.

The analysis of complete data packet during the procedure of file transport and voice communication:

During the procedure of file transport and voice communication, the sender sends data packets to the recipient, and the data packets are forwarded to a remote server. No any data can be used to identify the QQ client but the QQ number of the recipient in the data packets. Since then, the server directly and immediately forwarded the message to the recipient where would be determined by the IP address and port. For the recipient, there is no any approach to obtain the IP address and the port of the sender except for the data packets sent by the server. It means that the map of

the QQ number to the IP address and the port will be achieved on the server, and the network connection between the recipient and the sender will be established after the map.

For the analysis about the addressing method of QQ, see the technical report of Identification of submission from Shanghai Oriental computer judicial expertise, page 12 and page 13, No. 011 [2010].

The above analysis shows that, the map of the QQ number to the IP address is achieved in QQ system, and the addressing and communication are completed, that is equivalent to the address mapping method described in technical scheme of patent 98122785.6.

Following the comparative analysis, it is considered by the identification team: the technical features between F and f are essentially identical.

After the comparative analysis between the technical feature A-C which is a solution for assigning the addresses to the online computer by using the full digital code protected by the claim 1 of patent 98122785.6, and the technical feature a-c which is the solution of QQ communication, the result list is as follows:

Patent 98122785.6 Technical Features	communication technology Scheme in the QQ system Technical Features	Comparison Results
A. assigning the addresses to the online computer by using the full digital code	a. the QQ number is the full digital code, and it is equivalent to the full digital code address used in the communication between the online computers	The same
B, the said addresses is composed of the online number, or the telephone number or the category number;	b. the QQ number is the category number and the full digital code.	The same
C. the said online number refers to the digital number of the established network site, which is specified by the country or the area; the said telephone number includes the IDDD code of the country where user stays, the area code of the domestic DDD of the user's area, and the telephone number of the user's company or home; and the category number is digital number specified by the country or area for demarcating uniformly the business category.	c. each QQ number is the sub-category number assigned by Tencent with the directed method.	The same

After the comparative analysis between the technical feature D-F which is a solution according to Claim 1, for accessing the Internet by using the address coding solution on the claim 2 of patent 98122785.6, and the technical feature d-f which is the solution of QQ communication, the result list is as follows:

Patent 98122785.6 Technical Features	communication technology Scheme in the QQ system  Technical Features	Comparison Results
D. a solution according to Claim 1, for accessing the Internet by using the address coding solution.	d. the network protocol used by QQ is TCP/IP Protocol, that is, QQ using the network address of TCP/IP protocol.	The same
E. by inputting to the modem of the computer by dialing up a keyboard of a dial-up telephone or the keyboard of the computer.	e. by inputting QQ number to the computer by dialing up a keyboard of a dial-up mobile phone or the keyboard of the computer	The same
F. by linking the corresponding digital code; the FDCA can be interpreted by the dedicated interpreting software into an IP address, or a domain name, or a Chinese domain name hierarchy system, and each FDCA corresponds appropriately to one existing IP address, or domain name, or Chinese domain name hierarchy system; the E-mail box can be accessed or the Internet can be browsed.	f. The network addressing and network communication are achieved by the map of QQ number to the IP address.	The same

Summarized the of comparison results in the two tables, technical feature a-f of the relevant technical solution in QQ is substantially the same as the technical feature A-F of the claims in patent 98122785.6. According to the general principle of patent infringement judgment, the technical solution of the communication in QQ is the same as the technical solution of claim 1 and claim 2 in patent 98122785.6, whose title is "The Solution for Assigning Addresses to Online Computers in Full Digital Code".

The above conclusion of the identification team is based on the technical analysis report of "Identification of submission" whose file number is No. 011 [2010] from Shanghai Oriental computer judicial expertise. In the absence of protest, the identification of this group has made the consistent identification of advisory opinions.

### 6. Appraisal Comments

The Solution of instant communication in QQ software is the same as the technical solution on Claim 1 and Claim2 in the invention patent 98122785.6 whose title is "The Solution for Assigning Addresses to Online Computers in Full Digital Code".

Ministry of industry and information technology, software and integrated circuit Promotion Center

Forensic examination of intellectual property

(The special seal of Judicial Identification Business)

January 15, 2011

### Part III - Annexes

- Annex 1: Attorney for Judicial Identification, total 1 page;
- Annex 2: Technical analysis report which is about "Identification of submission" No. 011 [2010], from Shanghai Oriental computer judicial expertise, totals 59 pages;
- Annex 3: Identification of submission from Shanghai Oriental computer judicial expertise, No. 011 [2010], totals 23 pages;
- Annex 4: ZL98122785.6, invention patent specification, total 6 pages;
- Annex 5: the copies of Judicial Identification license, total 1 page.